

REMARKS

Claims 1-9, 14-15, 17, 18 and 20 are pending in this application. Claims 1-9 and 20 are withdrawn from consideration. By this Amendment, claim 14 is amended, and claims 10, 11, 13 and 19 are cancelled. No new matter is added by this Amendment. Support for the language added to claim 14 can be found throughout the specification, for example at paragraphs 17-21 and Example 2 at page 17 of the specification.

I. Rejections Under 35 U.S.C. §112

A. First Paragraph

Claims 10-11, 13-15 and 17-18 were rejected under 35 U.S.C. §112, first paragraph, as allegedly failing to comply with the written description requirement. Specifically, the Patent Office alleges that the recitation "composed mainly of nonoxide ceramic" fails to comply with the written description requirement.

Applicants point out that claims 10-11 and 13 have been cancelled, and claim 14 has been amended to recite a method for making a microporous ceramic material "consisting essentially of nonoxide ceramic." Such language is an acceptable transitional phrase under U.S. patent practice.

Applicants submit that this rejection is now moot. Reconsideration and withdrawal of the rejection are thus respectfully requested.

B. Second Paragraph

Claims 10-11, 13-15 and 17-18 were rejected under 35 U.S.C. §112, second paragraph, as allegedly being indefinite. This rejection is respectfully traversed.

Applicants initially point out that claims 10-11 and 13 have been cancelled.

The Patent Office alleges that the phrase "composed mainly of nonoxide ceramic" as recited in claim 14 is indefinite to its meaning. Applicants point out that claim 14 has been amended to recite "consisting essentially of" nonoxide ceramic.

The Patent Office further alleges that the term "predetermined shape" reads on an alleged nebulous mental step, allegedly rendering the recited process claim unclear in meaning and scope. To expedite prosecution of this application, Applicants amend claim 14 to remove the recitation of a "predetermined shape."

Applicants submit that the rejection is now moot. Reconsideration and withdrawal of the rejection are thus respectfully requested.

II. Rejection Under 35 U.S.C. §102(b)

Claims 10, 11 and 13 were rejected under 35 U.S.C. §102(b) as allegedly being anticipated by JP 01-188479 ("JP '479"). Applicants point out that claims 10, 11 and 13 have been cancelled. Applicants submit that this rejection is now moot. Reconsideration and withdrawal of the rejection are thus respectfully requested.

III. Rejections Under 35 U.S.C. §103(a)

A. JP '479

Claims 10, 11 and 13 were rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over JP '479. Applicants point out that claims 10, 11 and 13 have been cancelled. Applicants submit that this rejection is now moot. Reconsideration and withdrawal of the rejection are thus respectfully requested.

B. JP '479 in view of Mangels

Claims 14, 15, 17 and 18 were rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over JP '479 in view of U.S. Patent No. 4,285,895 ("Mangels"). This rejection is respectfully traversed.

The Patent Office alleges that JP '479 teaches all of the features recited in claim 14 except for the use of yttria. The Patent Office thus introduces Mangels as allegedly teaching adding yttria to the starting powders when making silicon nitride articles.

However, neither JP '479 nor Mangels teaches or suggests that both a yttrium oxide powder and an aluminum oxide powder are used as oxide powders, as recited in claim 14. As admitted by the Patent Office, JP '479 does not teach or suggest the use of yttria at all, and Mangels merely teaches the use of magnesium oxide, yttrium oxide, cerium oxide or zirconium oxide as a densification aid. See the Abstract of Mangels. Nowhere does Mangels teach or suggest the use of both yttrium oxide and aluminum oxide, particularly together along with a metal silicon powder and at least one nonoxide ceramic powder selected from the group consisting of silicon nitride powder and silicon carbide powder.

Applicants thus submit that JP '479 and/or Mangels do not teach or suggest the use of both a yttrium oxide powder and an aluminum oxide powder as oxide powders, as required in claim 14.

For the foregoing reasons, Applicants submit that JP '479 and Mangels, in combination or alone, do not teach or suggest all of the features recited in claims 14, 15, 17 and 18. Reconsideration and withdrawal of the rejection are thus respectfully requested.

C. JP '479 in view of Mangels, further in view of Kingery

Claim 17 was rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over JP '479 in view of Mangels, further in view of Kingery et al, "Introduction to Ceramics," second edition ("Kingery"). This rejection is respectfully traversed.

The Patent Office alleges that Kingery teaches that particle size is one of the most critical factors in ceramics processing. The Patent Office thus alleges that it would have been obvious to perform routine experimentation to determine the optimal particle size for the yttria.

Applicants submit that Kingery does not remedy the deficiencies of JP '479 and Mangels. In particular, Kingery does not teach or suggest the use of both a yttrium oxide powder and an aluminum oxide powder as oxide powders, as required in claim 14.

For the foregoing reasons, Applicants submit that JP '479, Mangels and Kingery, in combination or alone, do not teach or suggest all of the features recited in claim 17.

Reconsideration and withdrawal of the rejection are thus respectfully requested.

IV. Conclusion

In view of the foregoing, it is respectfully submitted that this application is in condition for allowance. Favorable reconsideration and prompt allowance of claims 1-9, 14-15, 17, 18 and 20 are earnestly solicited.

Should the Examiner believe that anything further would be desirable in order to place this application in even better condition for allowance, the Examiner is invited to contact the undersigned at the telephone number set forth below.

Respectfully submitted,

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